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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FERRIS, DERRICK W

ART UNIT PAPER NUMBER

2663

DATE MAILED: 12/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,742

Applicant(s)

ALOS, RAFAEL

Examiner

Derrick W. Ferris

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the reference characters in figures 1, 2, and 3 are not labeled. Please label the reference characters in the figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over EP000777394A1 to *Belpaire* in view of “Heterogeneity and OSI” to *Svobodova et al.* (“*Svobodova*”)

As to **claim 1**, *Belpaire* discloses a method and apparatus for electronic mail transmission as short messages towards a mobile radio network. In particular, note figure 1 and column 2, lines 1-8 and 39-42. With respect to the limitations, a first data transmission device is shown as MT1 or MT2 in figure 1. A first network for transmission of cellular packets is shown as GSMN (e.g., see column 1, lines 51-59) where short messages are cellular packets. A second transmission device is shown as terminal T1 or T2. A second network for transmission of packets is shown as the Internet. With respect to applicant’s vague figure 3, *Belpaire* further teaches a data

portion (i.e., field of useful data) traversing a bottom portion of a mail service gateway (i.e., F, P, D, A, and E) and a header portion (i.e., signaling field) traversing a top portion of a mail service gateway (i.e., F, DTM, E). In particular, removing and adding a new destination address accomplishes routing (e.g., see column 7, lines 20-32).

Belpaire may be silent or deficient to the further limitation “the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network”. In particular, *Belpaire* discloses the following:

“The embedded means E additionally embeds the new destination identifier, the data blocks and their related extensions data blocks in short messages and supplies these short messages to the network for mobile communications GSMN via the short message port” [column 7, lines 33-44].

In particular, at issue is the term “embeds” with respect to context of the disclosure where examiner notes the term is either not clearly defined or reads on applicant’s invention using a reasonable but broad interpretation of the recited claimed subject matter. In relation to a Mail Service Gateway (MSG) shown in figure 1 of *Belpaire* a filtering means F filters a mail message into head info used for routing, and data info or “naked info”. The head info is sent to the destination transfer means (DTM) and the remainder of the data information is sent to the processing means (e.g., see column 6, lines 10-16). Thus with respect to the term “embeds”, *Belpaire* discloses placing the new destination identifier and the modified data info or “naked info” into the short message. In other words, not mentioned in the above-passage (or in the cited references) is “embedding”

the original address (i.e., signaling portion) and useful data into the data field of the short message. Thus with respect to applicant's vague figure 3, *Belpaire* meets the limitation since the counter-parts of both the header and the data fields are mapped/embedded into a short message (i.e., from the teachings of the reference mapped and embedded are analogous). In other words, since *Belpaire* does not use the original address, examiner notes that the data field is left fully available. However, assuming the reference is unclear with respect to the context of "embeds" (i.e., the reference is instead completely silent to the type of address conversion) then the examiner also notes an obviousness rejection as follows.

Svobodova teaches the further limitation "the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network" by teachings various forms of interdomain addressing which include address mapping for an OSI standard protocol such as IP (e.g., see Section B on page 75) in reference to mapping.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the limitation "the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network". In particular, *Svobodova* modifies *Belpaire* by disclosing a direct mapping of a signaling field as is well known in the art (and not to be confused with address encapsulation also mentioned in Section 2 of *Svobodova* which is distinctly different from "embedding"). The suggestion or motivation for doing so would have been to hide the originating networks address as well as to offer uniform interdomain

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addressing (i.e., “unified use” in reference to applicant’s specification page 3, second paragraph from bottom). In particular, *Svobodova* cures the above-cited deficiency by providing a motivation found at the right-hand column on page 75. In addition, mapping addresses in a field as is known in the art and taught by *Svobodova* further provides a functional merger of two networks for unified use which has the advantage over the general encapsulation of using the signaling field of the first network for signaling of both networks, thus leaving the data field fully available.

As to **claim 2**, see e.g., column 7, lines 20-32 of *Belpaire*.

As to **claim 3**, see related extension data at column 7, lines 33-39 of *Belpaire*.

As to **claim 4**, see e.g., column 7, lines 20-32 where SMS packets are used for the GSM network (e.g., see column 4, lines 19-34) of *Belpaire*.

As to **claim 5**, see figure 1 of *Belpaire* and the rejection for claim 1 where the information is extracted during the filtering F section.

4. **Claims 1-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,047,194 A to *Anderson* in view of “Heterogeneity and OSI” to *Svobodova et al.* (“*Svobodova*”)

As to **claim 1**, *Anderson* discloses a method and apparatus for selectively permitting transmission of packet data to a mobile terminal. With respect to the limitations, a first data transmission device is shown a wireless host 14 in figure 1. A first network for transmission of cellular packets is shown as a radio link (e.g., see column 5, lines 6-10) where short messages (i.e., SMS-C) are cellular packets (e.g., see column 5, lines 60-64). A second transmission device is shown as Internet host 12. A

second network for transmission of packets is shown as the Internet 22. With respect to applicant's vague figures 2 and 3, *Anderson* teaches performing an address translation for the destination address (i.e., examiner notes that since *Anderson* teaches performing an address translation in the direction of the Internet host 12 to the wireless host 24, *Anderson* also implicitly teaches performing a translation from the wireless host 24 the Internet host 12 as well by performing the reverse procedure). A further gateway device is taught as the PLMN network (i.e., similar to applicant who does not particular show a specific gateway device or functionality, *Anderson* also doesn't show a particular gateway device as well). What may be at issue between the applicant and the examiner is the further limitation "the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network". Examiner notes a reasonable but broad interpretation of "counter part". In particular, like applicant who is also very vague on how the IP packets are transformed/mapped into SMS messages (in reference to applicant's figure 2), specifically, *Anderson* discloses translating the destination address of the header of the packet data (e.g., see column 6, lines 26-35; and column 7, lines 21-35). The packet data is then briefly encapsulated between the GPMSC 46 and the VPMSC 44. The packet data is then de-capsulated and sent as e.g., X.25 communications to the SMS-C before being sent as SMS to the wireless host 14 (e.g., see column 6, lines 45-51; and column 7, lines 37-56). Thus *Anderson* is silent to further encapsulating the new destination address with the body of the packet (e.g., see column 7, lines 48-65; and column 8, lines 51-58). Instead *Anderson* discloses the conventional techniques are used to transport the SMS packet (e.g., see column 7,

lines 55-57). Thus it may not be clear from the reference how the translation between SMS and IP is performed (i.e., in reference to applicant's vague figure 2).

Svobodova teaches the further limitation "the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network" by teachings various forms of interdomain addressing which include address mapping for an OSI standard protocol such as IP (i.e., see Section B on page 75).

Examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the limitation "the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network". In particular, *Svobodova* modifies *Anderson* by disclosing a direct mapping of a signaling field is well known in the art (i.e., replacing IE in the packet/SMS). The suggestion or motivation for doing so would have to hide the originating networks address as well as offer uniform interdomain addressing (i.e., "unified use" in reference to applicant's page 3, second paragraph from bottom). In particular, *Svobodova* cures the above-cited deficiency by providing a motivation found at the right-hand column on page 75. In addition, mapping addresses in a field as is known in the art and taught by *Svobodova* further provides a functional merger of two networks for unified use which has the advantage over the general encapsulation of using the signaling field of the first network for signaling of both networks, thus leaving the data field fully available.

As to **claim 2**, see e.g., column 6, lines 26-35.

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As to **claim 3**, see e.g., column 6, lines 26-35.

As to **claim 4**, see e.g., column 7, lines 20-57.

As to **claim 5**, see e.g., column 7, lines 20-57.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Teaches translating a TCP/IP packet into SS7 messages where the SS7 messages are circuit switched (e.g., see figures 3A and 3B).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225.


The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

Derrick W. Ferris
Examiner
Art Unit 2663


DWF


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TECHNOLOGY CENTER 2600 12/12/03